



MIAMI-SOUTH FLORIDA

National Weather Service Forecast Office

http://www.weather.gov/miami

Rainy Season 2015 Summary

Dry East and Wet West

October 27, 2015: The National Weather Service has determined that the 2015 south Florida rainy season, which started on May 10th, concluded on October 17th as the second in a series of weak cold fronts moved through the area, bringing slightly drier air and an end to the daily pattern of sea-breeze-driven showers and thunderstorms.

The duration of the 2015 rainy season was 161 days, slightly longer than the average of 155 days. The average measured rainfall from 33 observation sites across southern Florida was 33.29 inches, which is about 6 inches less than last year's average of 39.4 inches.

It was significantly drier than normal over southeast Florida, especially during the first half of the rainy season (Figure 1). Fort Lauderdale recorded its 3rd driest summer on record (June-August) with only 9.87 inches of rain. Hollywood Waste Water Plant only recorded 6.81 inches of summer rainfall and other southeast Florida locations failed to reach 10 inches during that time period. This lack of rainfall led to extreme drought conditions across southeast Florida in what is normally a drought-free time of year (Figure 2). A persistent east to southeast wind flow kept the east coast areas dry while focusing most of the daily showers and thunderstorms over the interior and Gulf coast regions. While drought was affecting the east coast, some interior and western locales were having one of the wettest summers in recent memory. LaBelle, Ortona and Golden Gate each recorded over 30 inches of rain from June through August, with LaBelle and Ortona's rainfall ranking in the top 10 summer rainfall on record.

Winds became more southwesterly in August and September, which led to daily showers and thunderstorms becoming more numerous and frequent along the east coast. This eventually ended the drought conditions across southeast Florida, but not

until late September. Even here, rainfall amounts were mostly normal to slightly below normal for the latter part of the rainy season (Figure 3).

Miami International Airport recorded a total of 33.45 inches of rain between May 1 and October 17, which is 10.28 inches below the normal for that time period.

Fort Lauderdale/Hollywood International Airport recorded a total of 22.23 inches of rain between May 1 and October 17, which is 18.34 inches below the normal for that time period.

Palm Beach International Airport recorded a total of 27.90 inches of rain between May 1 and October 17, which is 9.79 inches below the normal for that time period.

Naples Municipal Airport recorded a total of 29.69 inches of rain between May 1 and October 17, which is 8.13 inches below the normal for that time period.

Below is a list of the top 10 wettest sites for the 2015 rainy season:

Top 10 Rainfall Sites for 2015 Rainy Season	May 1- Oct 17	Departur e from Normal
1. Naples East/Golden Gate	51.61	+10.41
2. North Miami Beach	44.25	-0.45
3. Juno Beach (NWS COOP)	42.96	+4.30
4. Ortona (Glades County)	42.04	+2.38
5. LaBelle	41.70	+8.13
6. Muse	40.51	+4.28
7. West Kendall/Miami Executive Airport	38.64	-4.91
8. Sweetwater/NWS Miami	38.45	-7.66
9. Oasis Ranger Station (Collier County)	38.22	-5.20
10. Immokalee	37.65	+3.02

Below is a list of the 10 driest sites for the 2015 rainy season:

Top 10 Driest Sites for 2015 Rainy Season	May 1- Oct 17	Departure from Normal
1. Pompano Beach Airpark	21.89	-16.51
2. Pembroke Pines/North Perry Airport	22.07	-20.95
3. Fort Lauderdale/Hollywood Int'l Airport	22.23	-18.34
4. Fort Lauderdale Dixie Water Plant	24.73	-19.66
5. Cape Florida	25.39	-13.59
6. Hollywood Waste Water Plant	26.24	-16.48
7. Moore Haven	26.71	-5.94
8. Palm Beach International Airport	27.90	-9.79
9. Fort Lauderdale Beach	29.52	-12.08
10. Naples Municipal Airport	29.69	-8.13

Highest rainfall amounts for the duration of the rainy season were mostly in interior and western locations and the lowest amounts were across metro and coastal southeast Florida. For comparison purposes, average wet season rainfall ranges anywhere from 30-35 inches over the far interior and coastal locations to 40-45 inches across the interior suburbs of both the east and west coasts.

As is usually the case in the south Florida rainy season, high variability in local rainfall was noted. For instance, in the Naples area rainfall ranged from just under 30 inches at Naples Municipal Airport to over 50 inches in Golden Gate only a few miles inland. Similarly, North Miami Beach recorded over 44 inches of rain while a few miles to the north at North Perry Airport only 22 inches of rain fell.

Florida: Current 90-Day Departure from Normal Precipitation Valid at 8/2/2015 1200 UTC- Created 8/2/15 23:08 UTC

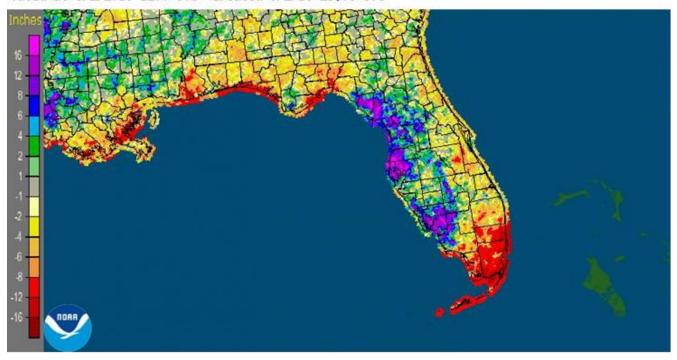


Figure 1: May-July rainfall departure from normal

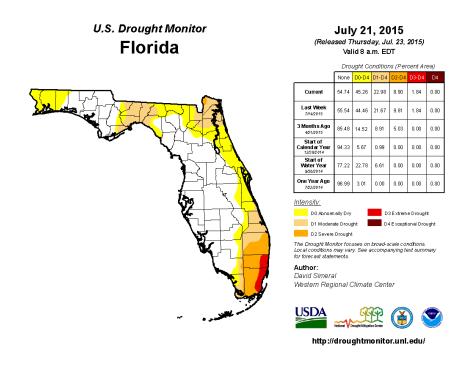


Figure 2: peak of drought conditions in late July

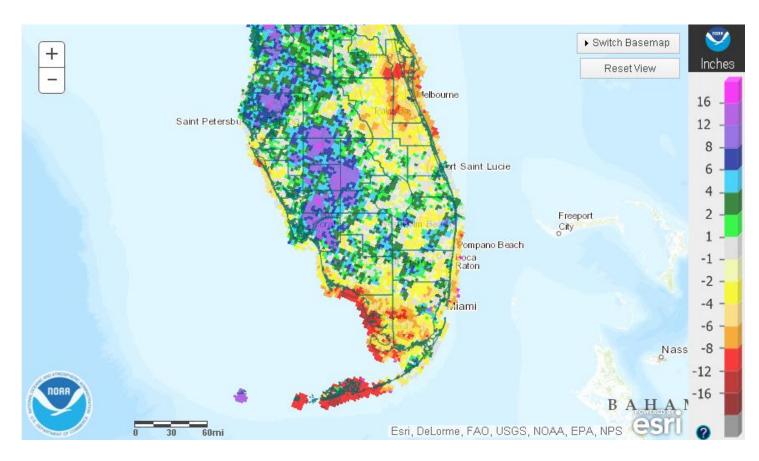


Figure 3: rainfall departure from normal mid-August through mid-October